

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12 (Canceled)

13. (New) An arrangement for sensing a frontal impact of a motor vehicle, comprising:

a plurality of impact sensors connected to a control device and integrated into a bumper of the motor vehicle; wherein,

each of the plurality of impact sensors includes a first contact sensor element which is disposed toward the front of the vehicle, and a second contact sensor element which is disposed away from the front of the vehicle;

the first and second contact sensor elements are spaced apart and separated from one another in a longitudinal direction of the motor vehicle by a free cavity which forms a measured section, and generate an acceleration signal or speed signal when a vehicle impact occurs.

14. (New) The arrangement as claimed in claim 13, wherein the free cavity which forms the measured section is surrounded by a foam-like shaped part.

15. (New) The arrangement as claimed in claim 13, wherein the first contact sensor elements lie on the outside of the impact sensors and are arranged on an outer skin of the bumper.

16. (New) The arrangement as claimed in claim 13, wherein:
the bumper is a front bumper of the motor vehicle; and
the second contact sensor elements lie on the inside of the impact sensors and are arranged on a front crossmember of the motor vehicle.

17. (New) The arrangement as claimed in claim 13, wherein the impact sensors each form separate units arranged on the bumper.

18. (New) The arrangement as claimed in claim 13, wherein the impact sensors are arranged in a hollow strip, at least partially extending over the width of the motor vehicle, on an outer skin of the bumper.

19. (New) The arrangement as claimed in claim 13, wherein the impact sensors are embodied as at least one of optical waveguides, piezo-electric sensors and a force-dependent resistor.

20. (New) The arrangement as claimed in claim 13, wherein a time difference between a first impulse against one of the first contact sensor elements lying on the outside of the impact sensors and a second impulse against one of the second

contact sensor elements lying on the inside of the impact sensors is measured in order to generate the acceleration signal or speed signal.

21. (New) The arrangement as claimed in claim 13, wherein, when an impulse is applied, the first and second contact sensor elements output to the control device one of a voltage signal and a change in resistance, which correlates with a contact force which applies the impulse.
22. (New) The arrangement as claimed in claim 13, wherein the control device outputs an activation signal to safety devices of the motor vehicle as a function of whether the acceleration signal or the speed signal exceeds a predefined threshold.
23. (New) The arrangement as claimed in claim 22, wherein the predefined threshold is assigned to a defined accident threshold for each of the acceleration signal, and the speed signal activation signal is output to a safety device which is assigned to the respective accident threshold.
24. (New) The arrangement as claimed in claim 22, wherein the safety devices comprise pedestrian protection devices.

25. (New) The arrangement as claimed in claim 14, wherein the first contact sensor elements lie on the outside of the impact sensors and are arranged on an outer skin of the bumper.

26. (New) The arrangement as claimed in claim 14, wherein:
the bumper is a front bumper of the motor vehicle; and
the second contact sensor elements lie on the inside of the impact sensors and are arranged on a front crossmember of the motor vehicle.

27. (New) The arrangement as claimed in claim 14, wherein the impact sensors are arranged in a hollow strip, at least partially extending over the width of the motor vehicle, on an outer skin of the bumper.

28. (New) The arrangement as claimed in claim 14, wherein a time difference between a first impulse against one of the first contact sensor elements lying on the outside of the impact sensors and a second impulse against one of the second contact sensor elements lying on the inside of the impact sensors is measured in order to generate the acceleration signal or speed signal.

29. (New) The arrangement as claimed in claim 14, wherein, when an impulse is applied, the first and second contact sensor elements output to the control device one of a voltage signal and a change in resistance, which correlates with a contact force which applies the impulse.

30. (New) The arrangement as claimed in claim 14, wherein the control device outputs an activation signal to safety devices of the motor vehicle as a function of whether the acceleration signal or the speed signal exceeds a predefined threshold.

31. (New) A sensor arrangement for detecting an impact on a motor vehicle, said sensor arrangement comprising:

a first sensor element arranged at an outward surface of a component of said vehicle;

a second sensor element arranged inwardly behind said first sensor element, away from said outward surface of said component; and

a cavity separating said first sensor element from said second sensor element, which cavity is crushable in response to an impact on said first sensor element whereby a displacement of said first sensor element due to an impact does not cause a displacement of said second sensor element.

32. (New) A sensor arrangement according to claim 31, wherein said cavity is surrounded by a crushable foam element.